Each One Teach One—National Marine Sanctuaries Bob Steelquist, Olympic Coast National Marine Sanctuary Jennifer Stock, Cordell Bank National Marine Sanctuary

Each One Teach One Teaching Activity

Introduction:

Field instruction presents many challenges to the teacher: so many distractions, keeping track of your students, physical hazards etc etc. On the other hand, from ancient times on, teachers and students have gathered in tree groves and experienced the bliss of real learning. The outdoors brings us to the world in its completeness and awakens the discoverer in all of us.

Each One Teach One is a simple technique for imparting small pieces of understanding to a group—one student at a time. Each student confronts new information, learns it and then is empowered to teach it to each other student. It allows the teacher rare one-on-one instructional time and lets you select "lessons" appropriate to particular student learning styles, energy levels and personalities.

As a teaching method it can be used with almost any subject or content area that can be divided into small bits such as species of plants or animals and ecological concepts, or physical objects.

Each One Teach One consists of five steps:

- 1. Introduction: This is a group session, with all members listening as a broader subject is introduced.
- 2. Teach One: The teacher works with each student individually to instruct a small amount of information.
- 3. Observe Student Teaching: The teacher watches as each student teaches his or her first lesson.
- 4. Students Teach Each Other: Each new "teacher" teaches a 2-minute lesson to each other student.
- 5. Wrap Up: Once reconvened, the group discusses the subject and the experience of being a teacher.

Procedure:

Prepare Prompts: Select a topic for which you can divide material into as many "mini-subjects" as you have students. Prepare cards, props or other prompts for each subject. The cards should have brief facts, statements, diagrams, pictures in bite-sized chunks. A mix of different forms of information can be useful if students have a wide variety of learning styles. The cards provide cues and structure to students' lessons.

Set Up Activity: Select a location that allows you to keep track of all your students — trails and beaches work well. Open areas like meadows or lawns work too if you can set up in a linear pattern that circles back to the starting point.

Second teacher: A second adult or leader is needed. Ideally, this person can continue discussion with students at the starting point until all students are engaged in the activity. This person is also the last "student" to pass through the process and can be a good person to "test" at the end. This person will also manage time to keep the activity moving.

Lecture: Introduce your subject with an overview. What larger concepts connect all of the individual parts being taught? Explain the steps. Explain the importance of teaching as a way of learning. Encourage all students to add what they may already know to the information they will be taught.

First Student: Teacher 1 leads Student 1 to just beyond earshot of group, selects a prompt card and gives a 2-minute lecture on the subject. Point to pictures, act out behaviors. Tailor your lesson to that student.

Second Student: After 2 minutes, Student 2 joins Teacher 1 and Student 1. Student 1 leads the lesson for Student 2 with the teacher listening, encouraging and making small suggestions.

Third Student: After 2 minutes, Teacher 1 and Student 2 move a short distance for their private lesson. Student 3 goes to Student 1 for their lesson.

Fourth Student: After 2 minutes, Student 3 joins Teacher 1 and Student 2 for the observed lesson and Student 4 goes to Student 1.

And so on...

Teacher 2 stays with the group as it diminishes, becoming the last student. When no new students come, each student moves up the chain until all have arrived at a final point, where Teacher 1 has collected a group of students who have completed the activity.

Conclusion: Ask the group about the experience. Did everyone like being a teacher? Did they become better teachers as they learned more? What were the interesting parts of the lesson? Finally, reinforce the larger concepts by

illustrating the relationships of the mini-lessons to the bigger picture. For a fun quiz, have every student ask Teacher 2 a test question.

Discussion:

Each One Teach One combines listening, speaking, individual and group instruction and creates an exciting and active context for outdoor learning. It can be tailored to many learning styles and personalities. It works in many physical settings.

Time management is critical. Stay on the 2-minute clock. Allow enough time for everyone to participate (Do the math – and plan some extra time plus intro and conclusion).

Request that students move in an orderly procession from one station to the next. Students that hurry to the next station interrupt the one-on-one sessions.

References and Further Reading

Joseph Cornell. *Sharing the Joy of Nature* (Dawn Publications; 1989) This is an expansion of Joseph Cornell's insightful theory and practice of sense-based experiential environmental education.

Joseph Cornell. *Sharing Nature With Children* (Dawn Publications; 1979) Joseph Cornell's brief classic on environmental education.

Thom Henley. *Rediscovery: Ancient Pathways, New Directions* (Lone Pine Publishing; Revised Edition 1996) Thom Henley's Rediscovery programs and methods blend traditional outdoor education with appropriate cultural settings and teachings to create exceptional learning and growing opportunities for youth of Native American, Native Hawaiian, Maori and other indigenous groups.

Gary Paul Nabhan and Stephen Trimble. *The Geography of Childhood* (Beacon Press; 1994). A series of thoughtful and necessary essays that explore the role of place in the learning process.

Carl Safina. Eye of the Albatross: Visions of Hope and Survival (Owl Books; Reprint edition April 1, 2003). Safina observes the breeding and rearing of Laysan albatross in the Northwestern Hawaiian Islands and, in the book, tracks the vast journeys of a female who forages for food for her growing chick. A powerful study of these birds and a good description of the history and research activities of these remote islands, reefs and shoals.